

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
10 August 2000 (10.08.2000)

PCT

(10) International Publication Number
WO 00/46358 A3(51) International Patent Classification: C12N 15/29,
C07K 14/415, C12N 15/63, 15/82, C07K 16/16, A01H
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(21) International Application Number: PCT/GB00/00197

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(22) International Filing Date: 25 January 2000 (25.01.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9902660.1 5 February 1999 (05.02.1999) GB(71) Applicant (for all designated States except US): PLANT
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Park, Colney Lane, Norwich, Norfolk NR4 7UH (GB).(81) Designated States (national): AE, AL, AM, AT, AU, AZ,
BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, UZ, UY, VN, YU, ZA, ZW.

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Published:

— With international search report.

[Continued on next page]

(54) Title: ARABIDOPSIS THALIANA DERIVED FRIGIDA GENE CONFERRING LATE FLOWERING

1 MSNYPTVAA QPTTIANPLL QRHQEQRR ELFKIVETES TSMDTIGQS
51 HQQFLKSID ELAASFVAVE TFRQFDDQL KHIESIENAI DSKLENGVV
101 LAARNNNHQ PMLSPPRNV SVETTVTVSQ PSQEIVPETS NKPEGRMCE
151 LMCSGLRKY IYANISDQAK LMEEIPSALK LAKEPAKVL DCIOKFYLG
201 BRAPTKESPM SSARQVSLLI LESFLMPVR GKXKVIKSW IKDXEATAV
251 AMKXPLMTGE GLAAAEKQDA RGLLLVAC GVPSNFRSTD LLDLIRMSGS
301 NEIAGALERS QFLVPMVSGI VESSIKRQH IEALMVYTF GHEKDFSAAL
351 VLTSFLEMSK ESFERAKRKA QSLPAFKEAA TKQLAVLSSV NQMETHKLD
401 FAKELPGWQI KEQIVSLEKD TLQLOKEMEE KARSLSIMEE AALAKRMWQ
451 QIKRPRLSPM EMPPTVSSSY SPIYDRSFP SQRDDQDEI SALVSSYLGP
501 STSFPHRSRR SPEYMWELPH GGLGRSVIY EHLAPNSYSP GHGRINRQY
551 SPFLVHGQRH PLQYSPFPH QOQLPVQIGR VYRHSFSEER YLGLSNQSP
601 RNSBGLDPK

(57) Abstract: Disclosed are isolated nucleic acids obtainable from the FRI locus of plants which encode polypeptides capable of specifically altering, particularly delaying, the flowering time of a plant into which the nucleic acid is introduced. One preferred embodiment is the FRI nucleotide sequence which encodes the polypeptide of Fig 6 (see the sequence of Fig 5, particularly bases 362-2188 thereof) or sequences degeneratively equivalent to these. Also provided are variant sequences (e.g. alleles, orthologues, derivatives) and complementary sequences, plus vectors, host cells, plants and associated processes of production and methods of use e.g. for influencing or affecting flowering time in a plant by expression or suppression of FRI or variant sequences.

PCT/GB00/00197



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